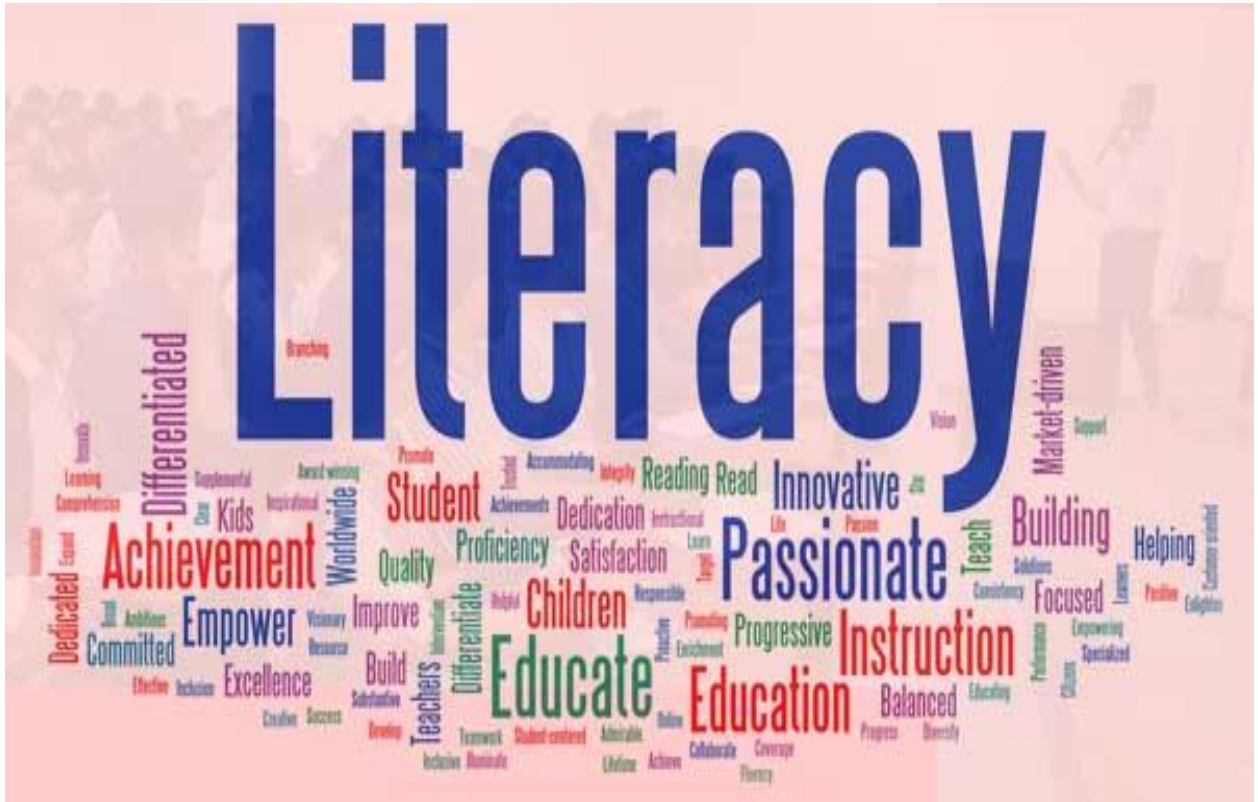


# REPORT



**Topic: To analyse factors affecting high and low literacy rates in Maharashtra districts**

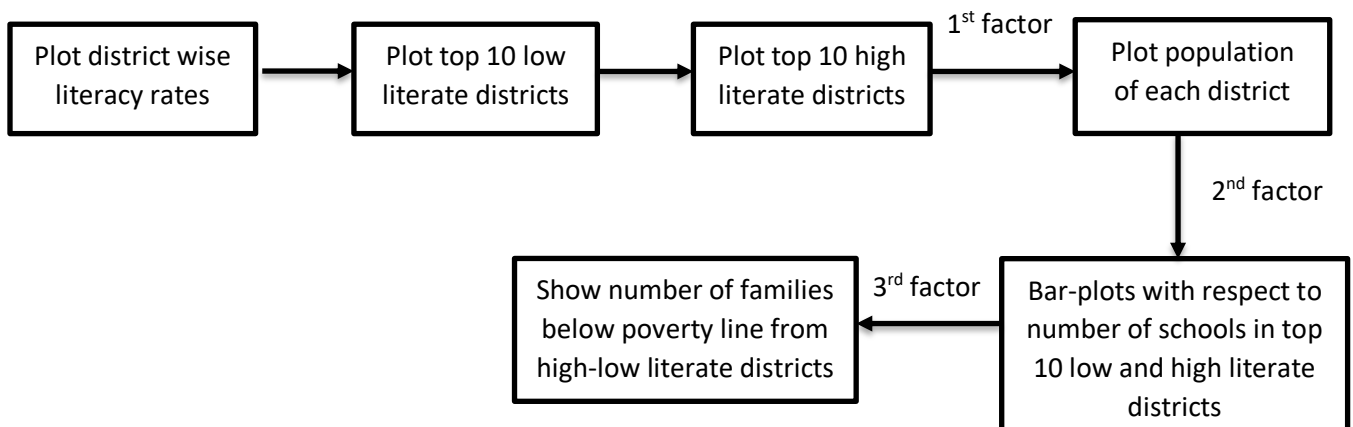
**Submitted By: Piyusha More**

**PRN: 20070243015**

**INTRODUCTION :** The topic chosen is from education domain, the reason to choose this domain was I wanted to study literacies of Maharashtra districts. Although Maharashtra is one of top 10 literate states in India , there are many districts in Maharashtra which are still struggling to increase their literacy rates. There are many families which cannot afford education finances just because some of them are farmers or other employees whose financial condition is not so good that they could educate their all children. So to analyse such districts I have created a flowchart to analyse process much better.

**OBJECTIVE :** To know what factors affects low or high literate districts in Maharashtra. To understand and show them using maps.

### FLOWCHART:



**DATASETS:** Dataset used in this project is of census data in the year 2011 Maharashtra education data which consists district codes, district names, literacy rates, various types of schools, working families. The reason I chose this dataset is I was getting all required data fields which are necessary to analyse reasons behind low and high literacy. Nextlly, I have used Maharashtra administrative boundary shapefile for analysing and showcasing analysed dataset.

**METHEDOLOGY:** To showcase education dataset on shapefile, there is need of merging both files by using a common column in this case “district name” is common column in both files and store new file in a new variable.

After merging, I plotted district wise literacy rates to compare it with each other.

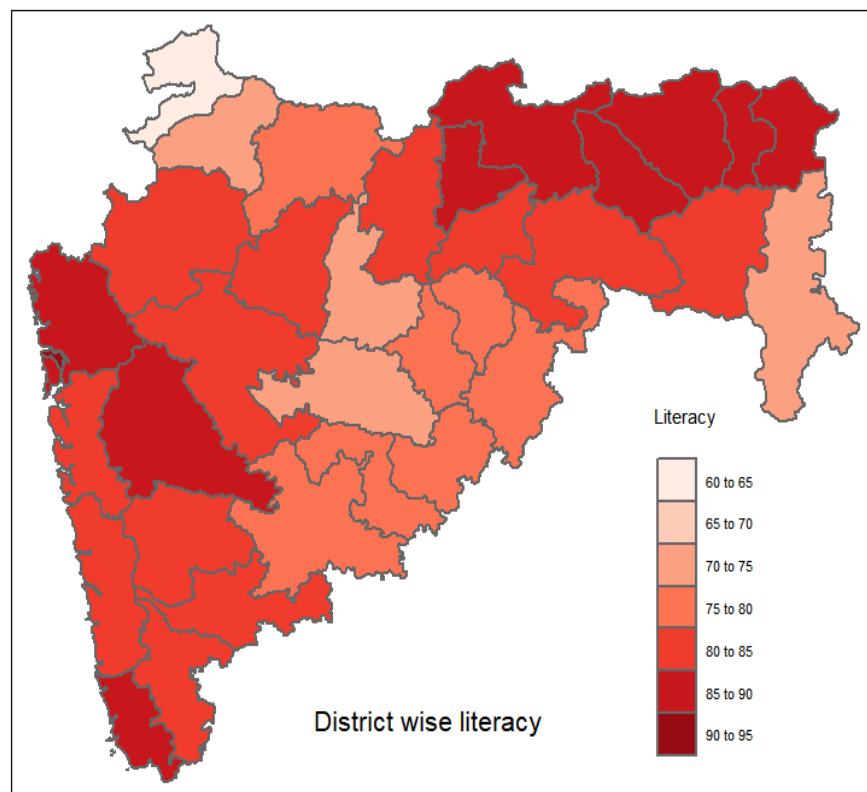


FIGURE 1

Then I plotted top 10 low literacy rate districts and top 10 high literacy rate districts,

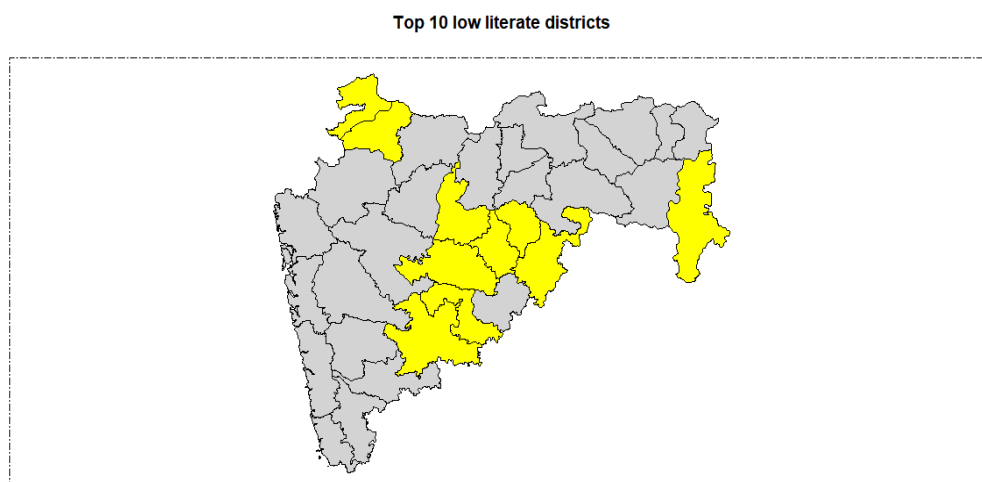
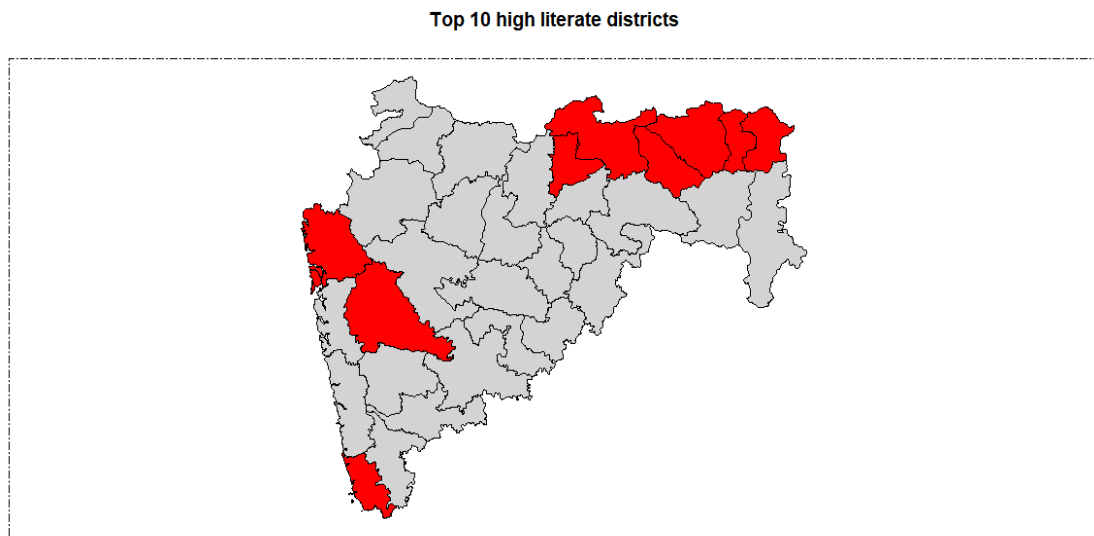


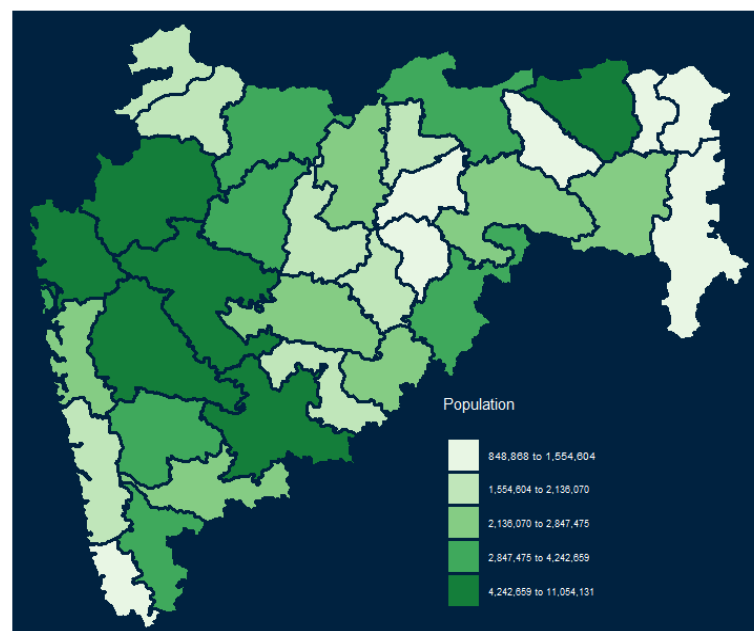
FIGURE 2



**FIGURE 3**

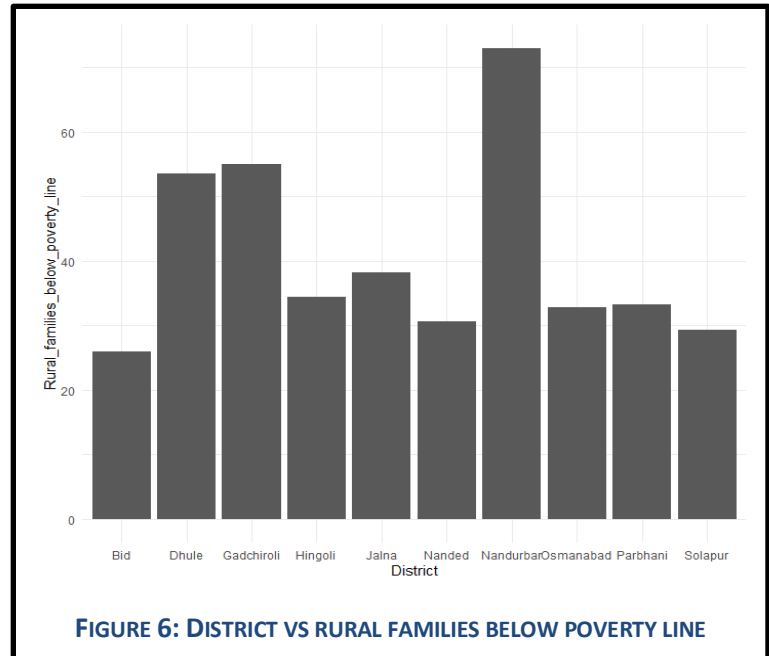
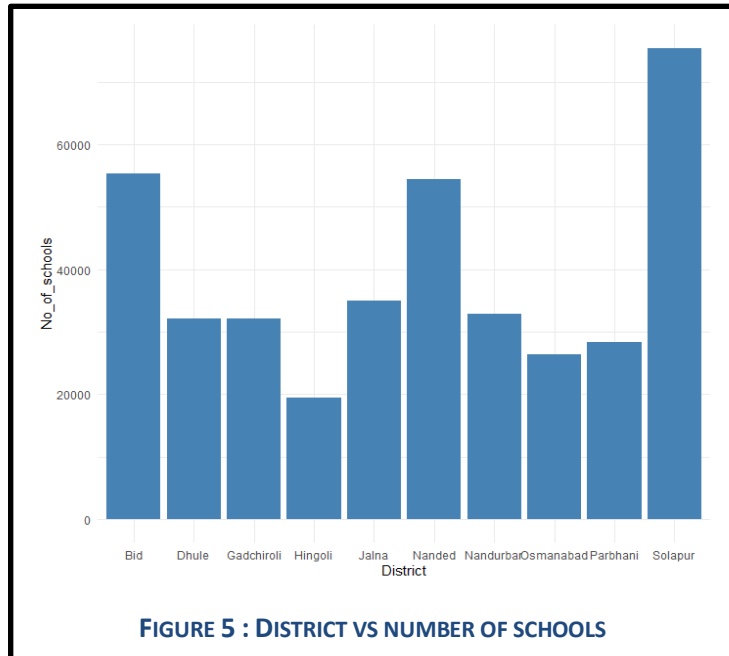
Then to understand reasons behind low literacy and high literacy, I selected few factors that are as follows-

1. Population of each district to study them comparatively like where is high population, low population or medium population as shown in Figure 4.
2. Number of schools in top 10 selected districts.
3. Total number of rural families below poverty line in top 10 selected districts.



**FIGURE 4**

From figure 4 and figure 3, we can easily compare that maximum number of districts which are shaded in dark green colour are high literate districts.



In figure 5 & 6 a bar-plot is plotted for top 10 low literate districts where we can see Solapur is having highest number of schools , because literacy rate of Solapur is 77% which is neither low nor high. Also population of Solapur is relatively high so there is a need of large number of schools. From fig 6 it can be seen that Solapur is having less number of families below poverty line. Then the Hingoli district which is having lowest number of schools. The main reason for less schools is that this district is not a lot economically grown district as we can see in fig 6 families under poverty line are approx. 35%. And moreover Hingoli district is more in agricultural field.

Then from fig 6, we can understand that Nandurbar district is having highest number of families below poverty line. So, this can be the reason behind low literacy rate of this district. We can also compare that number of schools in this district aren't so much. So we can say that Nandurbar is having lowest literacy rate.

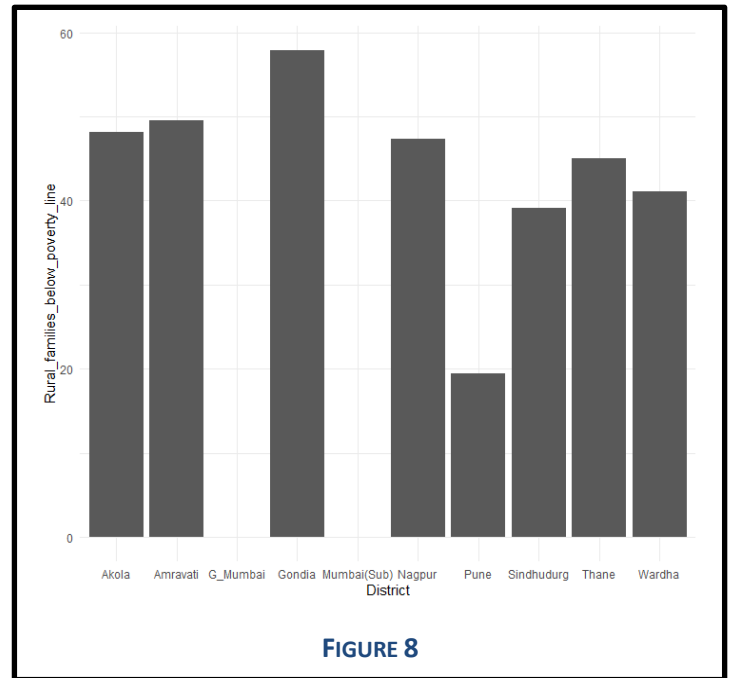
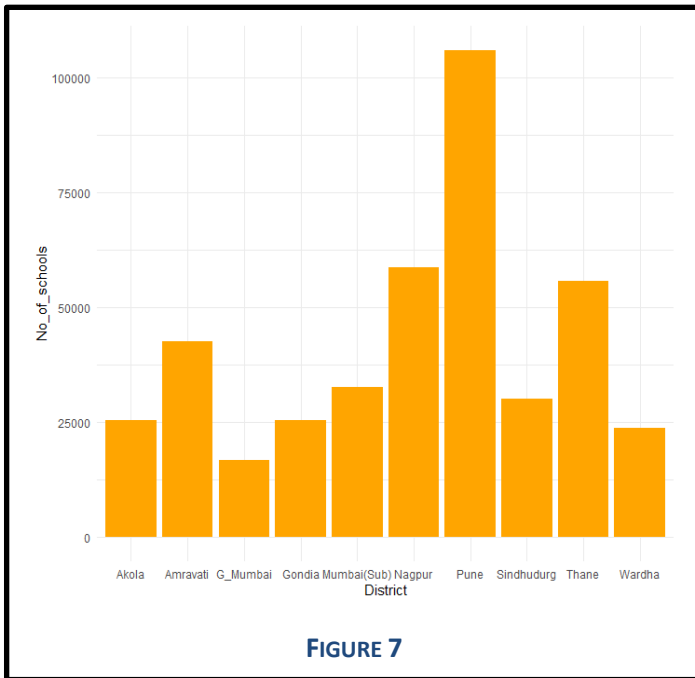


Figure 7 & 8 is a bar-plot plotted for top 10 high literate districts, where we can see that Pune district is having largest number of schools as it is also highly populated district, literacy rate of Pune is high. Also we can see that number of families below poverty line are less. So this all could be the reasons that Pune is having high literacy rate. Then Greater Mumbai which is having less number of schools because it is yet developing district as it is part of capital many employees or public are staying in Mumbai for working so they are not permanent residents so families below poverty line are not specified. Other districts like Akola, Amravati, Gondiya, are having much families below poverty line because number of villages are larger than cities and most of the part of these districts are covered by agriculture land.

**CONCLUSION:** In this project, I have got many information of districts of Maharashtra. Reasons behind why particular district is having low literacy or high literacy. The main objective of project which was finding rationale for low or high literate districts was achieved.